

July 21, 1949.

Mr. Norton D. Zinder,  
Dept. Genetics,  
Carnegie Institution,  
Cold Spring Harbor, L.I., N.Y.

Dear Norton:

Your letter received, and the cultures you wanted sent out immediately. I hope that they are all still viable. If not, send me a card and I'll replace them.

Although EMS-Lac is probably the medium of choice for experiments in linkage determination, asparagine is not really essential for T(0), and for that matter, you probably would do quite as well with "M-9" in your crosses. Don't forget the "linkage of B<sub>1</sub> to B<sub>2</sub>" if you want large yields of recombinants to do allelism tests with.

To help interpret the heterozygotes, I am badly in need of markers located within 10 or 15 units of Lac. If you should stumble onto any such, I would appreciate it if you could ask Dr. Demerec to have them sent to me. Except that some regular mechanism of elimination of segments including the Mal<sub>1</sub> and Gal<sub>1</sub> loci is operating, there is no further clarification.

Don just came by to mention that SW-13 was not included in the package just sent. It will be forwarded promptly.

Your 1st class mail, if any, is being forwarded. You have a bit of 2d class matter: "Genetics", and propaganda from Columbi. Do you want these forwarded?

In reference to lysogenicity, Dr. Stan Shapiro is working in the lab for a few weeks, and has been cross-testing with Don some 40 E. coli isolates from fowl intestines. About 30% of the cultures are lysogenic for one or more of the other cultures in the group. Some of these lysogenic phages appear to be quite "strong", and should be better material than lambda or the Salmonella phages for this study.

I hope that you can have your report without too much delay, and that you will find time to remain in touch with us here.

With best regards,

Sincerely,

Joshua Lederberg